CLAIMS

We claim:

1. A method comprising administering to a subject a therapeutically effective amount of a macrophage-derived factor, thereby producing a neurosalutary effect in said subject.

2. The method of claim 1, wherein said macrophage-derived factor is oncomodulin.

3. The method of claim 1, wherein said macrophage-derived factor is TGF-β.

4. The method of claim 1, further comprising administering to said subject a cAMP modulator.

5. The method of claim 4, wherein said cAMP modulator is non-hydrolyzable cAMP analogues, adenylate cyclase activators, macrophage-derived factors that stimulate cAMP, macrophage activators, calcium ionophores, membrane depolarization, phosphodiesterase inhibitors, specific phosphodiesterase IV inhibitors, beta2-adrenoreceptor inhibitors or vasoactive intestinal peptide.

6. The method of claim 1, further comprising administering to said subject an axogenic factor.

7. The method of claim 6, wherein the axogenic factor is AF-1.

8. The method of claim 6, wherein the axogenic factor is inosine.

9. The method of claim 1, wherein the neurosalutary effect is produced in said subject by modulating neuronal survival.

10. The method of claim 1, wherein the neurosalutary effect is produced in said subject by modulating neuronal regeneration.

11. The method of claim 1, wherein the neurosalutary effect is produced in said subject by modulating neuronal axonal outgrowth.

12. The method of claim 1, wherein the neurosalutary effect is produced in said subject by modulating axonal outgrowth of central nervous system neurons.

13. The method of claim 12, wherein the central nervous system neurons are retinal ganglion cells.

14. The method of claim 1, wherein the macrophage-derived factor is administered by introduction into a region of neuronal injury.

15. The method of claim 1, wherein the macrophage-derived factor is introduced into the cerebrospinal fluid of the subject.

16. The method of claim 1, wherein the macrophage-derived factor is introduced to the subject intrathecally.

17. The method of claim 1, wherein the macrophage-derived factor is introduced into a region selected from the group consisting of a cerebral ventricle, the lumbar area, and the cisterna magna of the subject.

18. The method of claim 1, wherein the macrophage-derived factor is administered to the subject in a pharmaceutically acceptable formulation.

19. The method of claim 18, wherein the pharmaceutically acceptable formulation is a dispersion system.

20. The method of claim 18, wherein the pharmaceutically acceptable formulation comprises a lipid-based formulation.

21. The method of claim 20, wherein the pharmaceutically acceptable formulation comprises a liposome formulation.

22. The method of claim 20, wherein the pharmaceutically acceptable formulation comprises a multivesicular liposome formulation.

23. The method of claim 18, wherein the pharmaceutically acceptable formulation comprises a polymeric matrix.

24. The method of claim 18, wherein the pharmaceutically acceptable formulation is contained within a minipump.

25. The method of claim 18, wherein the pharmaceutically acceptable formulation provides sustained delivery of the macrophage-derived factor for at least one week after the pharmaceutically acceptable formulation is administered to the subject.

26. The method of claim 18, wherein the pharmaceutically acceptable formulation provides sustained delivery of the macrophage-derived factor for at least one month after the pharmaceutically acceptable formulation is administered to the subject.

27. The method of claim 1, wherein the subject is a mammal.

28. The method of claim 27, wherein the mammal is a human.

29. The method of claim 1, wherein said subject is suffering from a neurological disorder.

30. The method of claim 29, wherein said neurological disorder is a spinal cord injury.

31. The method of claim 30, wherein the spinal cord injury is characterized by monoplegia, diplegia, paraplegia, hemiplegia and quadriplegia.

32. The method of claim 29, wherein said neurological disorder is epilepsy.

33. The method of claim 32, wherein the epilepsy is posttraumatic epilepsy.

34. The method of claim 29, wherein said neurological disorder is Alzheimer's disease.

35. A method comprising administering to a subject a therapeutically effective amount of a macrophage-derived factor in combination with a therapeutically effective amount of an axogenic factor, thereby producing a neurosalutary effect in said subject.

36. A method comprising administering to a subject a therapeutically effective amount of a macrophage-derived factor in combination with a therapeutically

effective amount of an axogenic factor and a therapeutically effective amount of a cAMP modulator, thereby producing a neurosalutary effect in said subject.

37. A method comprising administering to a subject a therapeutically effective amount of oncomodulin, thereby producing a neurosalutary effect in said subject.

38. A method comprising administering to a subject a therapeutically effective amount of oncomodulin in combination with an effective amount of AF-1, thereby producing a neurosalutary effect in said subject.

39. A pharmaceutical composition comprising a macrophage-derived factor and a pharmaceutically acceptable carrier packed with instructions for use of the pharmaceutical composition for producing a neurosalutary effect in a subject.

40. The pharmaceutical composition of claim 39, further comprising a cAMP modulator.

41. The pharmaceutical composition of claim 39, further comprising an axogenic factor.

42. The pharmaceutical composition of claim 41, wherein the axogenic factor is AF-1.

43. The pharmaceutical composition of claim 41, wherein the axogenic factor is inosine.

44. A method comprising administering oncomodulin to a subject suffering from a neurological disorder, thereby treating said subject suffering from a neurological disorder.

45. The method of claim 44, further comprising making a first assessment of a nervous system function prior to administering the oncomodulin to the subject and making a second assessment of the nervous system function after administering the oncomodulin to the subject.

46. The method of claim 45, wherein the nervous system function is a sensory function, cholinergic innervation, or a vestibulomotor function.